

Energy EFFICIENCY

October 2002 Volume 6, Issue 4

News From BPA—Your Northwest Energy Partner

Gov. Locke Announces Northwest Energy Technology Collaborative Formation



At a ceremony in Spokane on August 21, 2002, Washington Gov. Gary Locke announced the formation of the Northwest Energy Technology Collaborative (NWETC). The Collaborative is a joint effort of Northwest business, government, nonprofit, industry, and educational institutions. Their goal is to position the region as a recognized leader for innovative research, education, and product development for energy technology markets around the world.

The Collaborative will invest financial and in-kind support for the next five years to accelerate the

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Washington Gov. Gary Locke signed the Northwest Energy Technology Collaborative Agreement in Principle at a meeting with founding members in Spokane on August 21, 2002.

Founding members of the NWETC include:

- Avista Corporation
- Bonneville Power Administration
- Pacific Northwest National Laboratory
- Spokane Intercollegiate Research and Technology Institute
- Washington Technology Center

Additional members from the region are expected to join.

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Clearwater Power Service Territory Site of Zero Energy Manufactured Home

BPA has been working with the Nez Perce Tribe and the Washington State University Energy Program (WSU) to build, demonstrate, and install a Zero Energy Manufactured Home built in accordance with HUD Federal Manufactured Housing Construction Safety Standards. The goal is to promote innovative energy saving technologies to the



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Going Solar

Solar Water Heating Just Got Easier and More Reliable

BPA has purchased the "Bright Way to Heat Water" Program solar water heater specifications from the Eugene Water and Electric Board. Now the program materials will be available to regional utilities that want to implement solar water heating programs using the Bright Way Program free of charge. If you are interested in more information, contact Mark Johnson at mejohnson@bpa.gov or (503) 230-7669.

Conferences and Events

Idaho Energy Conference, Boise, ID
November 20-22
3314 Grace St.
Boise, ID 83703
Phone: 208-344-8594
URL: www.idahocities.org

2002 Energy Technology Showcase, Portland, OR
October 21-23
Phone: 206-285-4848
URL: www.newsdata.com

Northwest Solar Summit #5, Winthrop, WA
October 14-17
Cost: \$270 to \$320 member/non-memb
URL: www.westernsun.org

Download this brochure at <http://www.energy.state.or.us/renew/Solar/PV.htm>



Solar Panels Shine on GSA Building



The building shown above is the General Services Administration Fleet Services (GSA) building at the GSA Region 10 headquarters in Auburn, WA. The 2.5 kW photovoltaic system on the structure was installed in May. Michael Huber, BPA-Seattle, designed the system. GSA mechanics did the installation work, along with Huber, Rick Jones, and Micah Haman, the latter two BPA/NSR (National Systems & Research) employees.

--Michael Huber (206) 220-6778

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Going Solar

Franklin County PUD Hosts Solar Expo

Franklin County PUD hosted a highly successful Solar Expo late this spring with 30 or more demonstrations, vendors, and exhibits. Although the emphasis was on solar, there were vendors with exhibits featuring other renewables.

The Expo idea originated from a PUD brainstorming session on how to participate in Earth Day. Traditionally the Tri-Cities (Pasco, Kennewick, and Richland, WA) host an Earth Day festival in Richland which focuses on a wide variety of earth friendly things like recycling, green power, saving the native plants, kids projects. However, this year the Earth Day committee chose to focus more on



BPA and Western Sun sponsored the solar-powered water fountain at the Expo. Franklin PUD now owns the equipment.

individual efforts. Since the traditional Earth Day event was being changed, Franklin PUD jumped on the chance to showcase renewable power alternatives. Darroll Clark, Franklin PUD's Energy Services Manager recruited his whole department. Hundreds of people attended the Expo, and PUD staff showed up in droves to man booths and help in other ways.

Geoff Talkington, ENERGY STAR®, displayed his gas/electric hybrid car. There was also an electric scooter giveaway and solar car races. Eighteen grade school students built small race cars with solar kits provided by the PUD via www.Kelvin.com at \$10 each. Also on display were a solar panel that fueled a yard water fountain, and a tabletop solar house, loaned by BPA, with mini solar panels on the roof to power the lights inside. Participants enjoyed free popcorn from a popper powered by the Energy Northwest fuel cell. BPA Energy Efficiency Representative, Rosalie Nourse, worked a booth and also purchased a solar powered radio at the Expo. "Being out on 20 acres isn't conducive to having



OCTOBER is ENERGY AWARENESS MONTH!

Tell us what you are doing in your service territory to promote energy awareness. E-mail photos and articles for the January newsletter to jaoates@bpa.gov by November 1.

electricity nearby, and the solar radio fills in the gap just beautifully."

Article and photos submitted by Darroll Clark

-- Rosalie Nourse (509) 358-7463



Above and Below: Teacher George Sanborn (in the center, below) and students from Sentinel Tech High School, Mattawa, WA, attended the Franklin Co. PUD Solar Expo. They brought with them a national award-winning all-electric endurance race car (pictured) for display. Grade school students built solar-powered, tabletop race cars with kits provided by the PUD. They raced their cars down the Franklin PUD Solar Race Car Track and won awards. While not as prestigious as the Indy 500, the event had standing room only.



★★ GALAXY OF STARS ★★

Save a Watt Character Visits Ferry County PUD to Promote Energy Efficiency

Ferry County PUD used the Save a Watt (SAW) character for two community events this summer. The PUD is located in northeastern Washington and serves customers in Ferry and eastern Okanogan counties.

Want SAW to visit an event? Contact Jennifer Wood, BPA, at (509) 527-6230 or by e-mail to jlwood@bpa.gov. Jennifer will schedule delivery of the SAW costume, and can also provide SAW marketing materials and a banner.

-- Rosalie Nourse (509) 358-7463



Above: On Curlew, WA, Barrel Derby Day, a barrel was dropped into the river just across the Canada border. People purchased chances on what time the barrel would go under the bridge in Curlew. SAW (Steve VanSlyke, Ferry Co. PUD) visited the parade associated with that event.

C&RD Annual Reports Due Updated Manual and Technical Specifications Available

October 1, 2002, marked the end of the first full year of the Conservation & Renewables Discount. The year-end reports required by the program are due by October 30, 2002, from all participating utilities.

The 2003 updated C&RD Implementation Manual and Technical Specifications are available now in both print and electronic versions.

Contact your Energy Efficiency Representative for more information or view the updated materials on the web at http://www.bpa.gov/Energy/N/projects/cr_discount/.



Above: Prospector Days in Republic, WA, celebrate the era when mining was the primary activity in the area. SAW (John Friederichs, Ferry Co. PUD) handed out candy, brochures, and fan masks, which were a great hit.

Modern Electric Participates in C&RD

Valley Professional Center LLC, Spokane, WA, received a lighting retrofit under the BPA Conservation & Renewables Discount program, in which Modern Electric participates.

The ballasts and bulbs that were removed were recycled. The ballasts contained no PCBs, and the building owner took them to the local transfer station. The bulbs were taken to Ecolights Northwest in Seattle. In all, 394 items were retrofitted, including T-12s, exit lights, and incandescent bulbs.

*-- Rosalie Nourse
(509) 358-7463*

**Terri Richey,
Modern Electric, in
the Valley
Professional Center
storage room with
the ballasts and T12
bulbs that were
removed from the
office building.**





Continued from page 1

manufactured home industry and new homebuyers. The structure is in Clearwater Power Company service territory and will house operators of the Nez Perce Hatchery at Cherry Lane, ID.

The Nez Perce Tribe is funding basic construction, and BPA provided a grant for the incremental cost of the Home and Base House technologies. The WSU Energy Program provided technical support throughout the project. BPA, the Nez Perce Tribe, manufactured housing industry builders, suppliers, and associations worked together. Innovative technologies include: ENERGY STAR™ windows, appliances, lighting and HVAC equipment, Icynene foam wall, floor, and ceiling insulation, Solar Domestic Hot Water System, sun-tempered design and solar photovoltaic (PV) designed for net metering, passive solar design, and other promising technologies.

The Project also involves another home called the Base Home, which will be sited next to the Zero Energy Manufactured Home. The two homes have identical floorplans. The Base Home is built to Super Good Cents standards, but does not include as many beyond-current practice technologies as the Zero Energy Manufactured Home.

BPA and WSU will be working together in the next few months to install meters on both homes to monitor the energy performance of each over the course of a year. Since both homes will be located side-by-side, they will experience the same climate. Comparing the energy consumption of both homes will be informative.

— Adam Hadley (503) 230-4631

The goal of the Zero Energy Manufactured Home is to build, demonstrate, and install innovative energy saving technologies and promote them to the manufactured home industry and new homebuyers. The pictures to the right show Icynene insulation being installed in the walls and roof of the Zero Energy Manufactured Home displayed at the Spokane County Interstate Fair in September. The structure will be permanently sited in Clearwater Power Company service territory.

Fifth Super Good Cents Home Installed at Cle Elum



The new Monitoring & Evaluation (M&E) Building at Cle Elum Fish Facility near Yakima, WA.

The initial installation of four Super Good Cents manufactured homes at the Cle Elum Fish Facility, near Yakima, WA, was recently followed with a fifth SGC building. The first four buildings house facility staff and their families. The fifth building, the Monitoring and Evaluation Office, was constructed by Fuqua Homes, Bend, OR. It includes the same SGC insulation measures as the four homes, as well as an Insider Heat Pump for space conditioning of the building.

The new energy-efficient buildings at Cle Elum are an example of BPA practicing what it preaches.

--Don Davey (503) 230-3124



Spanish Version of Energy Savings Tips Available

The number of Hispanic individuals living in the Northwest has seen a steady increase over the past few decades. To help individuals with limited English language skills learn about energy efficiency practices, Energy Efficiency (EE) has translated the English version of the EE energy savings tips brochure into Spanish.

Rosa Leon, EE employee, volunteered to pose for photos for the new brochure. Rosa is originally from Guadalajara, Mexico, and speaks her native Spanish language fluently. She helped edit the text, so who better to grace the folds of the tip sheet?

For copies of the tip sheet, contact your Energy Efficiency Representative.

-- Becky Clark (503) 230-3158

Right: Rosa scowls at the incandescent bulb (the only one found in the office) and joyfully displays a compact fluorescent light. (The photo has been "doctored", but Rosa does have an identical twin sister who lives in Mexico.)

No, a las bombillas regulares



Si, compactas fluorescentes

NWETC, continued from page 1

growth of the region's energy technology industry. Current projects under consideration are primary market research, identification of intellectual property for commercialization, coordination of research and development efforts, and establishment of energy technology demonstration projects.

The NWETC believes that:

- The 21st century global economy requires an energy infrastructure that is flexible, scalable and reliable;
- Concerns about national security and economic stability require that U.S. reliance on foreign oil be reduced; and
- Environmental impacts must be minimized to ensure the highest quality of public health.

For more information, visit: <http://www.nwetc.com/> or contact your EE Representative.

"The NWETC is a timely development to build upon the leadership position we already have in the region regarding clean energy technology. The start we have today portends enhanced value through more jobs and investment in the coming years."



-- Mike Weedall, BPA

Vice President for Energy Efficiency

Understand Energy Implications of Design Work with Energy-10 Software

Imagine being able to estimate the energy life-cycle costs of a new building by simply entering numbers into a software program.

"Energy-10 allows the user to play 'what if' games while designing a building or home," said Energy-10 author Doug Balcomb, research fellow at National Renewable Energy Laboratory (NREL). "What if I change the windows? What if I add in energy efficient equipment? What if I let the daylight in and turn down the lights?"

Helping architects and engineers understand the energy implications of their work is critical in any strategy to reduce greenhouse gas emissions and global warming. The life-cycle cost feature helps the designer make the case for incorporating energy efficiency features by evaluating their cost effectiveness, which is usually very positive.

Energy-10, Version 1.5, is the result of collaboration among NREL, Lawrence Berkeley National Laboratory, and the Berkeley Solar Group. The software is distributed by the Sustainable Buildings Industry Council (SBIC) in Washington, DC. SBIC also provides training workshops and user support. They can be reached at (202) 628-7400, ext. 210 or at www.sbicouncil.org.

Training Opportunities

Get *EcoSmart!* Training EE Poster Contest

In August, Jen Drew from Nexus conducted the first Get *EcoSmart!* facilitator training for utilities that requested the seventh-grade pilot program. This web-based curriculum is designed to raise student awareness of human behavior and the environment. Nexus and Energy Efficiency provide teacher training. Each student receives a workbook and a home energy audit to perform with parental help.

EE is also sponsoring the first annual “Save a Watt” Poster Contest, which is open to eighth grade classes served by load-following utilities. The theme is “Conserving Electrical Energy at Home”. Co-sponsoring utilities select a local winner in November to submit to the regional contest. The winning entry in the regional contest will receive a gift certificate and have his/her poster displayed on the EE website.

Contact your Account Executive or EE Representative to join the Get *EcoSmart!* pilot program or for more information on the Save a Watt Poster Contest.

— Becky Clark (503) 230-3158

Daylighting Lab Opens

The Northwest Energy Efficiency Alliance, together with the University of Oregon, has opened the BetterBricks Daylighting Lab (Lab) in downtown Portland, OR, at 722 SW Second Ave. The Lab is a resource of BetterBricks, a program designed by the Alliance to encourage commercial building professionals to build more energy-efficient buildings. The Lab provides daylighting education, consulting, and laboratory services throughout Southwest Washington and the Portland area.

Architects and designers can consult the Lab on the issues of lighting schemes, the use of sun shades, glazing materials for windows, model studies, building orientation and how to minimize glare and optimize diffused light.

The Eugene Daylighting Lab provides services to the rest of the state of Oregon. The Eugene lab is located on the University of Oregon campus in the Department of Architecture Energy Studies in Buildings Lab. The Lighting Design Lab, Seattle, 400 E. Pine St., Suite 100, provides daylighting design services in the Northwest, focusing on Seattle and Western Washington.

For more information about the Lab, call Janelle Allen at (503) 241-1124, or visit the BetterBricks website at: <http://www.betterbricks.com>.



Distributed Generation

Come to a BPA/DOE sponsored FREE distributed generation exhibit and see a working fuel cell and microturbine, ask manufacturers’ representatives and utility representatives about distributed generation interconnection requirements. Talk with the National Hydrogen Association about the future of the hydrogen economy, and find out more about BPA’s Energy Web.

Learn more about distributed generation at one of several BPA/DOE sponsored FREE Exhibits **from noon to 2:00 p.m. at the following locations:**

- **10/24/02: NW Natural Building**, 220 NW 2nd Ave., **Portland, OR**
- **10/25/02: EWEB’s North Building** 500 E. Fourth Ave., **Eugene, OR**
- **10/30/02: Doubletree**, 18740 Pacific Hwy. S., **Seattle, WA**
- **11/01/02: Yakima Convention Center** 10 N. 8th Street, **Yakima, WA**
- **11/21/02: DoubleTree Riverside Hotel**, 2900 Chinden Blvd., **Boise, ID**

For more info call Becky Clark at (503) 230-3158

Register online at <http://www.bpa.gov/Energy/N/tech/dg/exhibit.shtml>

For code officials, only: Register for FREE distributed generation workshops, which will be held 8:00 a.m. to 5:00 p.m. at the same location and on the same dates as the open exhibits.

Northwest Energy Efficiency Council

NEEC is a non-profit trade association representing businesses providing energy efficiency goods and services to residential, commercial, and industrial energy users in the Pacific Northwest.

NEEC promotes training and expanded market opportunities for energy efficiency products and services for its members.

Check out NEEC on the web: <http://www.neec.net/>



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